

STATEMENT OF PURPOSE

Subject: Request for grant of study visa to pursue Masters of Engineering in Mechatronics and Robotics at Schmalkalden University of Applied Sciences Germany.

Respected Sir / Madam,

I am writing to present a compelling and strong case for my application for a student visa to pursue a Master's degree in Germany. My name is Ridima Gangrade, and I hold a Bachelor of Technology in Mechatronics Engineering from the University of Petroleum and Energy Studies, Dehradun (India). Currently serving as the Export Assembly Zone Manager for Harley-Davidson Motor Company at UNO Minda Pvt Ltd, I bring with me a wealth of experience in optimizing operations and enhancing overall performance within assembly zones dedicated to Harley-Davidson's exports. In my role at UNO Minda, I am entrusted with the pivotal responsibility of driving efficiency improvements, elevating product quality, and minimizing cycle times on the production lines. Leveraging my expertise in Value Stream Mapping and Mechatronics, I have successfully managed high-pressure positions, demonstrating the ability to prioritize multiple tasks and plan and manage diverse professional roles independently. Additionally, I have been given the responsibility to be part of the improvement team, where I am working with industrial IoT, implementing AI for safety measures, and using AI to create a fully functional system for the preventive maintenance of machines.

My journey into mechatronics engineering stems from a profound passion for robots and a deep interest in the ever-growing world of technology. During my undergraduate studies, I was inspired by renowned tech companies such as Tesla, FANUC, Siemens, and Rexroth Bosch. This inspiration fueled my commitment to pursuing a career in mechatronics, where I could contribute to the field's innovation and technological advancements. During my summer internship at Hero MotoCorp Magneti Marelli Auto Ltd, I gained hands-on experience with two-wheeler systems, focusing on Electronic Fuel Injection (EFI) and throttle body technologies. Utilizing Simulink, I contributed to the development of models, enhancing my skills in simulation and system modeling. This internship deepened my understanding of control systems and reinforced the importance of sensors and actuators in the automotive industry.

Despite the challenges of a year of online learning, I utilized the time to hone my skills. Collaborating with faculty mentors and seniors, I worked on patenting novel concepts in Agriculture, Medical, and Pandemic response sectors. I also enrolled in online courses to further my knowledge in KICAD, Arduino, Proteus, IoT, and Embedded Systems. My hands-on experience includes a project on designing a sustainable system for the agriculture sector, integrating mechanical and animal power. My major project involved the design and

development of a drone and launching system, providing valuable research experience and developing a reliable drone deployment solution. I actively engaged with cutting-edge technologies, gaining hands-on experience with 3D printers and laser cutting machines, enhancing my proficiency in fabrication and prototyping. Additionally, I analyzed drone flight characteristics in a wind tunnel, applying theoretical knowledge and sharpening my problem-solving skills. Serving as the Chairperson of the American Society of Mechanical Engineers (ASME) at UPES, I developed leadership, communication, collaboration, and time management skills. This combination of experiences has equipped me to thrive in an academic setting. Moreover, I strongly believe in social responsibility alongside my academic and professional pursuits.

I compassionately immersed myself in community service, dedicating my time to volunteering at orphanages and old age homes. These experiences not only allowed me to make a positive impact on the lives of others but also provided valuable insights into diverse societal needs. This commitment to social work has instilled in me a sense of empathy and teamwork, shaping my desire to utilize my skills and knowledge for the betterment of society. I am confident that these values will complement my academic and professional journey. Raised in a well-educated household, I have maintained a strong academic record and now aspire to deepen my knowledge of robotics. .

Germany, renowned for its academic excellence, progressive research environment, and thriving technology industry, is the perfect destination to nurture my passion for mechatronics and robotics. I am captivated by the country's dedication to fostering innovation, encouraging interdisciplinary collaboration, and supporting a diverse and inclusive academic community. I believe studying in Germany would be a tremendous opportunity to shape my future and align with the common goal of advancing technology, particularly in the field of robotics. Through this program, I envision myself developing cutting-edge solutions that enhance efficiency, sustainability, and technological advancement across various industries. I am eager to embark on this journey of academic and professional growth with the university.

I would be very grateful if you would consider my application and grant me a visa to pursue this Master's Program at the prestigious Schmalkalden University of Applied Sciences in Germany. This opportunity will greatly support my career progression and development in the field of Mechatronics and Robotics.

Sincerely,

Ridima Gangrade